

IN THE CLAIMS

1. (original) A rotary heat engine comprising:
  - a) a rotary member mounted for rotation about a horizontally - extending drive axis;
  - b) a generally annular array of chambers mounted on said rotary member and regularly disposed about said drive axis for absorbing heat from a heat source, said array of chambers being partially filled with liquid and partially filled with gas;
  - c) a common condenser for cooling fluid from and exchanging fluid with said chambers, said condenser being distinct from said array of chambers; and
  - d) a regular array of passageways each communicating between said common condenser and a respective one of said chambers, said passageways being circumferentially offset from said chambers for selectively trapping gas in chambers on one side of said drive axis to maintain an imbalance of liquid in said array of chambers which drives said rotary member.
2. (original) A rotary heat engine as claimed in claim 1 wherein said array of chambers is exposed to sunlight as said heat source.
3. (original) A rotary heat engine as claimed in claim 2 further comprising a glass member interposed between said array of chambers and incident sunlight.

4. (original) A rotary heat engine as claimed in claim 2 further comprising means for shading said condenser.

5. (original) A rotary heat engine as claimed in claim 1, wherein said liquid has a boiling point below that of water and said gas is the vapor of said liquid.

6. (original) A rotary heat engine as claimed in claim 1 further comprising means for water-cooling said condenser.

7. (original) A rotary heat engine as claimed in claim 1 wherein said condenser is generally annular and is mounted on said rotary member.

8. (original) A rotary heat engine as claimed in claim 1 wherein said condenser is axially offset from said array of chambers.

9. (original) A rotary heat engine as claimed in claim 1 wherein said condenser is radially offset from said chambers.

10. (original) A rotary heat engine as claimed in claim 1 wherein said drive axis defines a radial plane, said passageways comprise ducts extending in said radial plane, and said ducts are angularly offset in said radial plane.

11. (original) A rotary heat engine as claimed in claim 1 wherein at least one of said passageways includes a regenerator.

12. (new) A rotary heat engine comprising:

- a) a rotary member for rotation about a horizontally-extending axis;
- b) a generally annular array of chambers on said rotary member regularly about said axis for absorbing heat from a heat source and being partially filled with liquid and partially filled with gas;
- c) a condenser for exchanging with said chambers and cooling at least one of said liquid and gas, said condenser being distinct from said chambers; and
- d) a regular array of passageways communicating between said condenser and, respectively, said chambers, said passageways being circumferentially offset from said chambers for trapping said gas in said chambers on one side of said axis,

whereby to maintain an imbalance of said liquid in said array of chambers for said rotation of said rotary member.